Title: SOMATOSTATINS AND METHODS
Applicant(s): Mark A. Sheridan et al.
Serial No.: 09/727,7
"Express Mail" Num. EL 776900900 US Sheet 1 of 8 APPROVED O.G. FIG. 86 SS-14-I Preprosomatostatin II" RK YG DRAFTSMAN ⋒ SS II" mRNA œ + -24 <u>ئ</u> The time then then been then the tall the 000 8 RK YG Prepròsomatostatin II' 4 17 1 E. III III SS II' mRNA œ + -24 5 000-83 SS-14 RX YG Preprosomatostatin I **SS-26** SS I mRNA œ

Docket: 255.0

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Title: SOMATOSTATINS AND METHODS Applicant(s): Mark A. Sherid: at al. Serial No.: 09/727,739 Foceomber "Express Mail" Number: EL6900900 US

t al. December 1, 2000 ...6900900 US

Docket: 255.0004 0101

CLASS SUBCLASS APPROVED O.G. FIG. DRAFTSMAN ⋒

PPSS-I

81	152 -88	214 -67	272	340 -25	403	466	549 632 715
SEQ ID NO: 8 5'GGGGGGGGGGGGAACAGGAGCAGCAGAACTCAAAGAAAGCCAATCTCAACGATTGTCTGCCCAATTGAACCACTTTATCC	ATCCTCTGCCTCCCCGAGACCCAGAAGAAG ATG CTC TCG ACG CGT GTC CAG TGC GCC CTA GCA CTA CTC SEQ ID NO: 3 Met Leu Ser Thr Arg Val Gln Cys Ala Leu Ala Leu Leu	TCC CTA GCC CTG GCC ATC AGC AGC GTC TCT GCC GCT CCG TCC GAT GCC AAA CTC CGC CAG CTG Ser Leu Ala Leu Ala Ile Ser Ser Val Ser Ala Ala Pro Ser Asp Ala Lys Leu Arg Gln Leu	CTC CAA CGG TCA CTC ATG GCA CCT GCA GGC AAA CAG GAG CTT GCC AGG AAT ACA CTC GTA GAG Leu Gln Arg Ser Leu Met Ala Pro Ala Gly Lys Gln Glu Leu Ala Arg Asn Thr Leu Val Glu	CTA CTC TCA GAG CTC GCA CAT GTA GAG AAC GAG GCG ATT GAA TTG GAT GAC ATG TCT CAT GGC Leu Leu Ser Glu Leu Ala His Val Glu Asn Glu Ala Ile Glu Leu Asp Asp Met Ser His Gly	GIG GAG CAG GAG GAT GTG GAT CTC GAG CTG GAG CGT GCA CCC GGC CCA GTA CTG GCT CCA CGT Val Glu Glu Asp Val Asp Leu Glu Leu Glu Arg Ala Pro Gly Pro Val Leu Ala Pro Arg	GAA CGC AAG GCT GGA TGC AAG AAC TTC TGG AAG ACC TTT ACA TCG TGT TAA TGAATCTACTC Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys ***	CTTTACTGTGTGTACTACATCTCATCTTTTTGATCACTCATTGCTGAATCCAATGCACCGACCATGGCCTAACCCTCCTCT TCAAAAAATTTAAATAAACACTGTTATAACTTTTAACAATCATTCTGATGTTTCTATCGCTCACTTAGGATTTTTTTCGAAAAG GAACACAAGAAAGATGTTCTACAAATGTATGCGGTTCTGCTTTGACTGTGATTTATGTATTTTGGCAGACTATTTAATTG TTTGTTTG <u>AATAAA</u> ATCTGTGTGTTTTCAGAACCAAAAAAAAAAAAA

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O.G. FIG.	CLASS SUBCLASS	
APPROVED	BY	DRAFTSWAN

75 70	139/-91	196/-72 191/-68	253/-53 248/-49	304/-35 305/-30	358/-18 350/-14	415/+2 398/+2	477	552 535
PPSS-II' and PPSS-II" accaggcctgctccagctccagctccaccgcgtgcca accaggcctgctccataccgactgatccagcatagccagatccagcacagcccagctccacctgctccaccgcgtccagcctcaccagctccaccagctccagcctcaccagcaccagcctcacacctgctccacctgatccagcacaccccggtccagcctcacacaca	SEQ ID NO: 9 Lys Arg tccctgcaaacaaaaccaaattgttggag ATG AAG GTC TGC CGA ATC CAC TGT GCC CTG GCC tccctgcaaacccaactcagcttggag ATG AGG GTC TCC CAA ATC CAC TGT GCA CTG GCC SEQ ID NO: 15 Met Arg Val Ser Gln Ile His Cys Ala Leu Ala	CTG CTG GGT TTG GCC CTG GCC ATT TGC AGC CAA GGA GCC GCC TCG CAG CCC GAC CTG CTG CTG GCT CTG GCC ATT TGC AGC CAA GGA GCC GCC TCG CAG CCA GAC CTG Leu Leu Gly Leu Ala Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu	Arg GAC CTC CGC AGC CGC AGA CTC CTT CAG AGG GCT CGT GCC GCT GCA TTG CCA CAC AGG GAC CTC GCG AGC CGC CGA CTC CTC CAG AGG GCC CTG GCC GCT GCA TTG CCA CAC AGG ASp Leu Ala Ser Arg Arg Leu Leu Gln Arg Ala Leu Ala Ala Leu Pro His Arg	AGT GGA GTA AGC GAG CGG TGG AGG ACA TTC TAT CCC AAC TGT CCT TGC CTG *** *** AGT GGA GTA AGC GAG CGA TGG ACA TTC TAT CCG AAC TGT CCT TGC CTG AGG TGG Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro Cys Leu Arg Trp	AGG CCC AGG AAA GTG AAG TGT CAA *** GCG GGG GCT AAA GAG GAC CTG CGT GTG GAG AGG CCC AGA AAA GTG AAG GGT CCA CAG CTG AAG GCC AAA GAG GAC *** *** *** ATG Lys Val Lys Gly Pro Gln Leu Lys Ala Lys Glu Asp	CTG GAG CGC TCA GTG GGC AAC CCC AAC CTT CCC CGT GAG CGC AAA GCC GGC CTG GAG CGC TCA GTG GAC *** *** *AAC CTT CCC CCC CGC GAG CGC AAA GCT GGC CTG GAG CGC TCA GTG GAC *** *** *AAC CTT CCC CCC CGC GAG CGC AAA GCT GGC Leu Glu Arg Ser Val Asp	TGC AAG AAC TTC TAC TGG AAG GGC TTC ACT TCC TGC tga gggaagaataaaccgaccacctt TGC AAG AAC TTC TAC TGG AAG GGA TTC ACT TCT TGC taa gggaagaaaagcctgaccacctt Cys Lys Asn Phe Tyr Trp Lys Gly Phe Thr Ser Cys ###	atgacatgacgctgccaatcacgtcacaccgccaacttacacctgacgaatgcagccaatcaacagttagctgtg atgacacaatgcattcaatcacatcac
14 PPSS-II' 20 PPSS-II"	PPSS-II'	PPSS-II'	PPSS-II'	PPSS-II'	PPSS-II'	PPSS-II.	PPSS-II'	PPSS-II'
SEQ ID NO: SEQ ID NO:	*			.*	*			·

PPSS-II'

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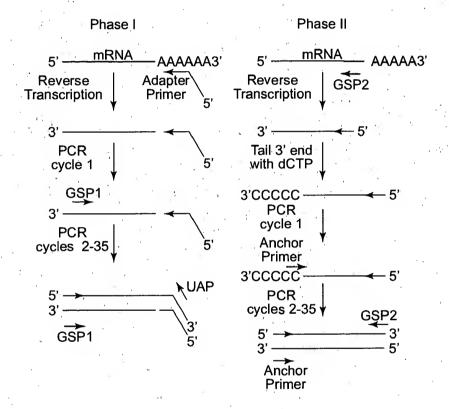


Fig. 4

Title: SOMATOSTATINS AND METHODS
Applicant(s): Mark A. Sheridan et al.
Serial No.: 09/727,739
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APPROVED O.G. FIG. š

The limit of the l

Nulceotide Identity

RIII 82.8 49.0 43.7 52.3 51.0 52.0 51.5 51.1 52.8 54.5 4.1 IIR III 48.2 39.1 44.9 50.0 50.0 49.5 48.0 49.8 52.5 5.5 43.9 IIR III 58.1 77.0 67.7 68.9 67.9 69.4 69.4 72.5 5.6 35.6 52.3 IIR III 60.1 58.8 55.1 53.8 55.3 56.8 56.8 56.8 4.7 40.9 73.5 52.3 IIII 60.1 58.8 55.1 53.8 56.9 56.9 56.2 56.2 56.2 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>_</th> <th></th> <th></th> <th></th>								_			
82.8 49.0 43.7 52.3 51.0 52.0 51.5 51.1 52.8 INT. 48.2 39.1 44.9 50.0 50.0 49.5 48.0 49.8 43.9 INT. 67.7 68.9 67.9 69.4 69.4 35.6 52.3 INT. 67.7 68.9 67.9 69.4 69.4 40.9 73.5 52.3 INT. 65.7 68.7 67.7 68.4 67.7 44.7 70.5 49.2 64.4 INT. 75.0 74.5 62.6 75.5 38.6 66.7 46.2 63.6 78.8 88.6 97.0 84.3 84.3 38.6 66.7 46.2 63.6 78.8 88.6 97.0 87.4 91.2 38.6 64.4 46.2 62.9 78.8 90.9 96.2 98.5 INT. 42.4 73.5 47.7 68.2 87.1 91.7 97.7 98.5 100	54.5	52.5	72.5	9.99	72.2	28.3	84.3	92.2	95.5	2.86	H
82.8 49.0 43.7 52.3 51.0 52.0 51.5 INT. 48.2 39.1 44.9 50.0 50.0 49.5 43.9 INT. 67.7 68.9 67.9 67.9 35.6 52.3 INT. 60.1 58.8 55.1 53.8 40.9 73.5 52.3 INT. 66.7 68.7 67.7 44.7 70.5 49.2 64.4 INT. 75.0 74.5 38.6 66.7 46.2 63.6 78.8 88.6 97.0 38.6 66.7 46.2 63.6 78.8 88.6 97.0 38.6 64.4 46.2 62.9 78.8 89.9 96.2 38.6 64.4 46.2 62.9 78.8 90.9 96.2 42.4 73.5 47.7 68.2 87.1 91.7 97.7	52.8	49.8	69.4	56.8	67.7	75.5	84.3	91.2	94.4	M	
82.8 49.0 43.7 52.3 51.0 52.0 INTIL 48.2 39.1 44.9 50.0 50.0 43.9 INTIL 58.1 77.0 67.7 68.9 35.6 52.3 INTIL 60.1 58.8 55.1 40.9 73.5 52.3 INTIL 65.7 68.7 44.7 70.5 49.2 64.4 INTIL 75.0 38.6 66.7 46.2 62.9 78.8 88.6 38.6 66.7 46.2 62.9 78.8 80.9 38.6 64.4 46.2 62.9 78.8 90.9 42.4 73.5 47.7 68.2 87.1 91.7	51.1	48.0	69.4	55.3	68.4	62.6	84.3	92.4	B	98.5	98.5
82.8 49.0 43.7 52.3 51.0 A3.9 A3.9 A4.9 50.0 43.9 A3.6 52.3 A3.7 67.7 35.6 52.3 A3.7 60.1 58.8 40.9 73.5 52.3 66.7 65.7 44.7 70.5 49.2 64.4 65.7 38.6 66.7 46.2 63.6 78.8 38.6 66.7 46.2 63.6 78.8 38.6 64.4 46.2 62.9 78.8 42.4 73.5 47.7 68.2 87.1	51.5	49.5	67.9	53.8	67.7	74.5	84.1	R	0.76	96.2	97.7
82.8 49.0 43.7 52.3 IRIU 48.2 39.1 44.9 43.9 IRIU 58.1 77.0 35.6 52.3 IRIU 60.1 40.9 73.5 52.3 66.1 44.7 70.5 49.2 64.4 38.6 66.7 46.2 63.6 38.6 66.7 46.2 63.6 38.6 64.4 46.2 62.9 42.4 73.5 47.7 68.2	52.0	50.0	. 6.89	55.1	68.7	75.0	୍ର	6.78	9.88	6.06	91.7
82.8 49.0 43.7 43.9 43.7 43.9 60.7 48.2 39.1 40.9 73.5 52.3 44.7 70.5 49.2 38.6 66.7 46.2 38.6 66.7 46.2 38.6 64.4 46.2 42.4 73.5 47.7	51.0	50.0	2.79	8.85	2.59	1 원티	78.8	0.87	8.87	78.8	87.1
82.8 49.0	52.3	44.9	0.77	60.1	140	64.4	9.69	67.9	9:69	62.9	68.2
82.8 43.9 40.9 40.9 38.6 38.6 38.6 38.6 42.4 42.4	43.7	39.1	58.1	JEW	52.3	49.2	46.2	45.5	46.2	46.2	47.7
MASS	49.0	48.2	I BIL	52.3	73.5	2.07	2.99	65.2	2.99	64.4	73.5
2.4 2.4 2.4 2.4 2.4 2.4 2.4 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5	82.8	∏R "	43.9	35.6	40.9	44.7	38.6	38.6	38.6	38.6	42.4
<u>α 4 ω 4 4 4 4 4 4 4 4 </u>	TRI	84.1	45.5	35.6	44.7	47.7	42.4	42.4	42.4	42.4	45.5

Amino Acid Identity

0.G. FIG.	CLASS SUBCLASS	
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$_{\rm I^a}$	۱
Comparison of Amino Acid Sequences of Peptides Derived from Preprosomatostatin I ^a	
from	
Derived	
Peptides	
oţ	ı
Sequences	
Acid	
Amino	
of	l
Comparison	

	-20	-10	+1	+10 +14	
Rainbow trout ^b	T .	PG * * PVLA	RERKAGCK	FFWKTFTS	Ü
Hagfishd	AVERPRO	ореочиврво	G C R	FFWKTFTS	B
Lampreya	· · ·		GCK	FFWKTFTS	ID NO:
Torpedod		•	Ω Ν	FFWKTFTS	ID NO:
Ratfishd			G C K	FFWKTFTS	ID NO:
Bowfind	0,	SAN * * PALAI	G C K	FFWKTFTS	ID NO:
Sturgeond			PCK	FFWKTFTS	ID NO:
Catfishd		,	Ω Ν	FFWKTFTS	ID NO:
Salmond			AGCKN	FFWKTFTSC	SEQ ID NO: 1
Anglerfish	1	AASGGPLLAI	G C K	FFWKTFTS	ID NO:
Eeld	•		Ω Ν	FFWKTFTS	ID NO:
Flounderd			G C K	FYWKGFTS	ID NO:
Sculpind			G C K	FYWKGFTS	ID NO:
Froge			GCK	FFWKTFTS	ID NO:
Salamanderd		**	G C K	FFWKTFTS	ID NO:
Alliqator ^d		,	G C K	FFWKTFTS	ID NO:
Pigeond			GCK	FFWKTFTS	ID NO:
Ovined		SANSNPAMAI	S C R	FFWKTFTS	ID NO:

Fig. 6

Applicant(s): Mark A Serial No.: 09/727,73

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CLASS SUBCLASS APPROVED O.G. FIG. DHAFTSMAN βź

The first of the first of the first

F. L. III C. D. L.

Sequence comparison

TRII" TRII" CFIII GFII GFIII FRII CFI CFI CFI CFI CFI CFI CFI CFI CFI C	MKVCRIHCALALIGIALAICSQGAASQPDLDLASRRLLQRARAAAWPHRSGVSERMSSSPLRLALALMCIVSAVGVISCGRP
===	MLSCRIQCALAALSIVLALGCVTGAPSDPRLRQFLQKSLAAAAGKQELAKYF
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FRI	
GFI	
AFI	
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TRT	
FRII	
GFIII	
GFII	! ! !
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CFII	
TRII"	Q
TRII	

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SEQ

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SEQ SEQ SEQ

LAELLA-BLAEAENEVLDSDEVSRAAE-SEGARLEMERAAG---PMLAPRERKAGCKNFFWKTFTSC LAELLS-EPNQTENDALEPEDLPQAAE-QDEMRLELQRSANS-NPAMAPRERKAGCKNFFWKTFTSC LAELLS-EPNQTEIDALEPEDLSQAAE-QDEMRLELQRSANS-NPAMAPRERKAGCKNFFWKTFTSC LAELLS-EPNQTENDALEPEDLSQAAE-QDEMRLELQRSANS-NPAMAPRERKAGCKNFFWKTFTSC LAELLS-EPNQTENDALEPEDLSQAAE-QDEMRLELQRSANS-NPAMAPRERKAGCKNFFWKTFTSC LAELLS-EPSQTDNEALESDDLPRGAE-QDEVRLELERSANS-SPALAPRERKAGCKNFFWKTFTSC WRTFYPNCPCLR--PRKVKCP-AGAKE-DLR--VELERSVGN-PNNLPPRERKAGCKNFYWKGFTSC WRTFYPNCPCLRWRPRKVKGPQLKAKE-DL-----ERSV----DNLPPRERKAGCKNFYWKGFTSC LPELQW-MLSNNELTPVQVERAPRS-----RLELVRRDN----T-VTSKPLNCMNYFWKSRTAC VEELLAQMSLPEATFQREAEDASMATE-G---RMNLERSVDS-TNNLPPRERKAGCKNFYWKGFTSC VEKLLSLLSI PEMEMR - - EKGLSMAGE - SEDLRLEQERSAES - SNQLPTRVRKEGCKNFYWKGFTSC .SGLLD--GVDNSVLDGEIAPVPFDAEEPLESRLE-ERAVYNRLSQLPQRDRKAPCKNFFWKTFTSC LVELLS-ELAHVENEAIELDDMSHGVE-QEDVDLELERAPG---PVLAPRERKAGCKNFFWKTFTSC LADLLS-ELVQAENEALEPEDLSRAVE-KDEVRLELERAAG---PMLAPRERKAGCKNFFWKTFTSC LSGWTD--S-RESNLVEVERNVPDPPE-P----KIPPSVK--FPRLSLRERKAPCKNFFWKTFTMC LAELLLSDLLQGENEALEEENFPLAEGGPEDAHADLERAASG-GPLLAPRERKAGCKNFFWKTFTS(LAELLS-EPSQTENEALESEDLSRGAE-QDEVRLELERSANS-NPALAPRERKAGCKNFFWKTFTS

Title: SOMATOSTATINS AND METHODS
Applicant(s): Mar Sheridan et al.
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APPROVED O.G. FIG.
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